

**What is claimed is:**

1. A chair massager, comprising:
  - a) a base;
  - b) a back support to place a user's back and neck  
5 thereon when the user is seated in the base,  
wherein the back support has a cover, first and  
second ends, wherein the first end is fixed to  
the base;
  - c) a rider making a lengthwise reciprocal movement  
10 between the first and second ends of the back  
support;
  - d) a lifter liftedly engaged to the rider so that  
the lifter makes a forward reciprocal movement  
perpendicular to the lengthwise reciprocal  
15 movement of the rider; and
  - e) massage bumps veiled by the cover and attached  
atop the lifter to massage along the user's  
back and neck in accordance with the relative  
movements of the rider and lifter.
- 20 2. The chair massager of claim 1 wherein the lifter  
comprises:
  - a) a roller gear engaged to and powered by a first  
motor, wherein the first motor is fixed to the  
25 rider;

b) a bump support having a top portion and a bottom portion, wherein the massage bumps are mounted on the top portion; and

5 c) an engagement body downwardly extending from a bottom portion of the bump support, wherein a lower portion of the engagement body is releasably inserted in and fittingly supported by the rider, wherein an opening is formed through the engagement body to define inner

10 walls, wherein one of the inner walls is configured to a rack gear so that the first roller gear is rollably engaged to the rack gear, whereby the roller gear rotation by the first motor enables the lifter to make the

15 forward reciprocal movement.

3. The chair massager of claim 1 wherein the lifter comprises:

20 a) a bump support having a top portion and a bottom portion, wherein the massage bumps are mounted on the top portion; and

b) a gear unit including a bolt gear downwardly extending from the bottom portion of the bump support, an elongated nut type gear having a

25 circular outer periphery, a first gear

incorporated on and along the circular outer  
periphery, and a second gear engaged to the  
first gear and connected to a first motor  
attached to the rider, wherein the bolt gear is  
5 releasably engaged in the nut type gear whose  
bottom end is rotatably attached to and  
supported by the rider, whereby the second gear  
rotation generates the first gear rotation and  
the subsequent rotation of the nut type gear  
10 enables the lifter to make the forward  
reciprocal movement in accordance with the  
releasable engagement of the bolt gear and the  
nut type gear.

15 4. The chair massager of claim 1 wherein the massage  
bumps are partitioned to first and second pairs,  
wherein said each pair bumps are aligned parallel to  
the direction of the rider reciprocation.

20 5. The chair massager of claim 1 further comprising:  
a) first and second bump holders propping and  
maintaining the first and second pair bumps,  
wherein the first and second bump holders are  
tapered toward each lower end thereof;

- b) a first engagement member to rockingly engage the lower ends of the bump holders to the top portion of the lifter; and
  - c) a second engagement member to rollingly engage the massage bumps thereto.
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6. The chair massager of claim 1 wherein the massage bumps each include a heater.
- 10 7. The chair massager of claim 6 wherein the heater is a heating lamp generating heat and infrared rays.
8. The chair massager of claim 1 wherein at least one of the massage bumps is fixed to the lifter and
- 15 shaped in hemisphere.
9. A chair massager, comprising:
- a) a base;
  - b) a back support to place a user's back and neck thereon when the user is seated in the base,
- 20 wherein the back support has a cover, first and second ends, wherein the first end is fixed to the base;

- c) a rider making a lengthwise reciprocal movement between the first and second ends of the back support;
  - d) a pair of pulleys linked by a rope and  
5 respectively mounted in the first and second ends of the back support, wherein a predetermined portion of the rope is fixedly attached to the rider so that the pulley rotation enables the rider to generate the  
10 lengthwise reciprocal movement;
  - e) a lifter liftedly engaged to the rider so that the lifter makes a forward reciprocal movement perpendicular to the lengthwise reciprocal movement of the rider; and
  - 15 f) massage bumps veiled by the cover and attached atop the lifter to massage along the user's back and neck in accordance with the relative movements of the rider and lifter.
- 20 10. The chair massager of claim 9 further comprising:
- a) guide rails provided substantially parallel to the rope and between the first and second ends of the back support; and
  - b) guide rollers attached to the rider, wherein  
25 the guide rollers are rollably fit in the guide

rails to facilitate the lengthwise  
reciprocation of the rider.

11. The chair massager of claim 9 wherein the lifter  
5 comprises:
- a) a roller gear engaged to and powered by a first  
motor, wherein the first motor is fixed to the  
rider;
  - b) a bump support having a top portion and a  
10 bottom portion, wherein the massage bumps are  
mounted on the top portion; and
  - c) an engagement body downwardly extending from a  
bottom portion of the bump support, wherein a  
15 lower portion of the engagement body is  
releasably inserted in and fittingly supported  
by the rider, wherein an opening is formed  
through the engagement body to define inner  
walls, wherein one of the inner walls is  
20 configured to a rack gear so that the first  
roller gear is rollably engaged to the rack  
gear, whereby the roller gear rotation by the  
first motor enables the lifter to make the  
forward reciprocal movement.

12. The chair massager of claim 9 wherein the lifter  
comprises:

a) a bump support having a top portion and a  
bottom portion, wherein the massage bumps are  
5 mounted on the top portion; and

b) a gear unit including a bolt gear downwardly  
extending from the bottom portion of the bump  
support, an elongated nut type gear having a  
circular outer periphery, a first gear  
10 incorporated on and along the circular outer  
periphery, and a second gear engaged to the  
first gear and connected to a first motor  
attached to the rider, wherein the bolt gear is  
releasably engaged in the nut type gear whose  
15 bottom end is rotatably attached to and  
supported by the rider, whereby the second gear  
rotation generates the first gear rotation and  
the subsequent rotation of the nut type gear  
enables the lifter to make the forward  
20 reciprocal movement in accordance with the  
releasable engagement of the bolt gear and the  
nut type gear.

13. The chair massager of claim 9 wherein the massage  
25 bumps are partitioned to first and second pairs,

wherein said each pair bumps are aligned parallel to the direction of the rider reciprocation.

14. The chair massager of claim 9 further comprising:

- 5 a) first and second bump holders propping and maintaining the first and second pair bumps, wherein the first and second bump holders are tapered toward each lower end thereof;
- 10 b) a first engagement member to rockingly engage the lower ends of the bump holders to the top portion of the lifter; and
- c) a second engagement member to rollingly engage the massage bumps thereto.

15 15. The chair massager of claim 9 wherein the massage bumps each include a heater.

16. The chair massager of claim 9 wherein the heater is a heating lamp generating heat and infrared rays.

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17. The chair massager of claim 9 wherein at least one of the massage bumps is fixed to the lifter and shaped in hemisphere.

25 18. A chair massager, comprising:



- a) a base;
- b) a back support to place a user's back and neck thereon when the user is seated in the base, wherein the back support has a cover, first and second ends, wherein the first end is fixed to the base;
- c) a rider making a lengthwise reciprocal movement between the first and second ends of the back support, wherein the rider has at least one nut fixed thereto;
- d) a threaded shaft geared through the nut and rotatably engaged at the first and second ends of the back support to generate the lengthwise reciprocal movement of the rider;
- e) a lifter liftedly engaged to the rider so that the lifter makes a forward reciprocal movement perpendicular to the lengthwise reciprocal movement of the rider; and
- f) massage bumps veiled by the cover and attached atop the lifter to massage along the user's back and neck in accordance with the relative movements of the rider and lifter.

19. The chair massager of claim 18 wherein the lifter comprises:

- a) a roller gear engaged to and powered by a first motor, wherein the first motor is fixed to the rider;
- b) a bump support having a top portion and a bottom portion, wherein the massage bumps are mounted on the top portion; and
- c) an engagement body downwardly extending from a bottom portion of the bump support, wherein a lower portion of the engagement body is releasably inserted in and fittingly supported by the rider, wherein an opening is formed through the engagement body to define inner walls, wherein one of the inner walls is configured to a rack gear so that the first roller gear is rollably engaged to the rack gear, whereby the roller gear rotation by the first motor enables the lifter to make the forward reciprocal movement.

20 20. The chair massager of claim 18 wherein the lifter comprises:

- a) a bump support having a top portion and a bottom portion, wherein the massage bumps are mounted on the top portion; and

b) a gear unit including a bolt gear downwardly extending from the bottom portion of the bump support, an elongated nut type gear having a circular outer periphery, a first gear  
5 incorporated on and along the circular outer periphery, and a second gear engaged to the first gear and connected to a first motor attached to the rider, wherein the bolt gear is releasably engaged in the nut type gear whose  
10 bottom end is rotatably attached to and supported by the rider, whereby the second gear rotation generates the first gear rotation and the subsequent rotation of the nut type gear enables the lifter to make the forward  
15 reciprocal movement in accordance with the releasable engagement of the bolt gear and the nut type gear.

21. The chair massager of claim 18 wherein the massage  
20 bumps are partitioned to first and second pairs, wherein said each pair bumps are aligned parallel to the direction of the rider reciprocation.

22. The chair massager of claim 18 further comprising:

- a) first and second bump holders propping and maintaining the first and second pair bumps, wherein the first and second bump holders are tapered toward each lower end thereof;
- 5 b) a first engagement member to rockingly engage the lower ends of the bump holders to the top portion of the lifter; and
- c) a second engagement member to rollingly engage the massage bumps thereto.

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23. The chair massager of claim 18 wherein the massage bumps each include a heater and the heater is a heating lamp generating heat and infrared rays.

- 15 24. The chair massager of claim 18 wherein at least one of the massage bumps is fixed to the lifter and shaped in hemisphere.